## **REMARKS**

In this non-final Official Action, the Examiners have again rejected the previously pending claims under 35 U.S.C. 102(b) as being anticipated by the Blecha *et al.* PCT Publication, WO 96/32129. In addition, the Examiners have rejected the previously pending claims under 35 USC 102(a) as being anticipated by the Chan *et al.* article [*J. Biol. Chem.* 273:28978-28985 (1998)].

In response, applicants have currently amended independent claims 11 and 15 respectively; cancelled dependent claim 12, without prejudice; and retained previously pending dependent claims 13 and 14 respectively. By the present claim amendments, the claim cancellation, and the discussion presented hereinafter, applicants believe they have overcome and obviated each basis for rejection stated by the Examiners in the instant non-final Official Action.

Applicants and their undersigned attorney wish to state their intentions clearly. It is applicants sincere desire and purpose to advance the prosecution of this application on the merits, and not to delay or to hinder its progress. On this premise, applicants will now address and review each of the different substantive bases for rejection stated by the Examiners in the instant Official Action with regard both to its legal requirements and the relevant factual circumstances.

I. The Altered Scope Of Applicants' Presently Claimed Invention

Applicants believe that it is useful to summarize briefly what are the altered requirements and restricted scope of their invention as presently redefined in order to identify what applicants' claimed invention actually is, as well as to separate and distinguish the re-defined invention from what it is not.

Applicants' invention is claimed as a "PR-39 derived oligopeptide family". This term, "PR-39 derived oligopeptide family", has been re-defined by currently amended independent claims 11 and 15 respectively as a combination of specific elements having explicitly stated and carefully delineated limitations; and each independent claim now comprises a severely size-restricted family whose individual members are pharmacologically active and operative to cause a selective inhibition of protease-mediated degradation in-situ after being introduced intracellularly to a viable cell. It will be noted and appreciated, however, the membership encompassed by the PR-39 derived oligopeptide family has been markedly re-defined by currently amended independent claims 11 and 15.

In addition, two exemplary embodiments and representative members of this re-defined family of severely size-restricted oligopeptides are identified by previously pending dependent claims 13 and 14 respectively.

Dependent claim 13 recites a precisely recited sequence of 11 amino acid

residues; and dependent claim 14 delineates a precisely recited sequence of 8 amino acid residues. Accordingly, the severely size-restricted family membership recited by currently amended claim 11 encompasses and includes the exemplary 11 and 8 residue length embodiments presented by newly added claims 15 and 16; as well as constitutes the full breadth and scope of all the claims now pending in the instant application.

It will be noted also that the wording of currently amended independent claims 11 and 15 individually recite the commonly shared characteristics and properties for the short-length amino acid residue length structures comprising the severely size-restricted membership of this PR-39 derived oligopeptide family. In particular, currently amended claim 11 delineates a carefully circumscribed and size-limited membership which is restricted to PR-39 analog compositions which are less than 14 amino acid residues in length; are pharmacologically active; are functionally specific; and are structurally related as a family of oligopeptides. Equally important, the commonly shared characteristics and properties of the severely sizerestricted PR-39 derived oligopeptide family members are overtly stated and individually set forth as requisite elements and specific limitations by each of currently amended independent claims 11and 15; but are further delineated as specific amino acid residues in sequence by dependent claims 13 and 14 respectively.

Moreover, it will be appreciated that currently amended independent claims 11 and 15 explicitly demand six specific requirements for each member of this family of derived oligopeptides. These requirements are: (i) that the maximum length of each oligopeptide be less than 14 [or less than 12] amino acid residues; (ii) that each oligopeptide begin with the sequence "Arg-Arg-Arg" at its N-terminal end; (iii) that each oligopeptide be an analog of the native PR-39 peptide; (iv) that each oligopeptide be operative selectively to alter the proteolytic degradation activity of proteasomes in-situ; (v) that each oligopeptide be operative selectively to interact in-situ with at least the  $\alpha$ 7 subunit of such proteasomes as are present within the cytoplasm of the cell; and (vi) that each oligopeptide be operative selectively to alter the proteolytic degradation activity of proteasomes having an interacting  $\alpha 7$  subunit such that the proteolytic degradation mediated by said proteasomes against at least one peptide selected from the group consisting of NFκB inhibitor IκBα and hypoxiainducing factor (HIF)- $1\alpha$  becomes selectively inhibited without substantially altering the proteolytic degradation of other peptides mediated by said proteasomes.

Within this restricted scope and context, dependent claim 13 provides an 11 amino acid residue length restatement of the broader definition; while dependent claim 14 recites an 8 amino acid residue length restatement.

Both of these are representative examples which comply fully and completely with the explicit requirements of currently amended independent claims 11 and 15.

## II. The Rejection Under 35 U.S.C. 102(b)

The Examiners have again rejected previously pending claims 11-15 under 35 U.S.C. 102(b) as being anticipated by the Blecha *et al.* publication [PCT International Publication No. WO 96/32129].

The Examiners' view, as stated at page 4 of the instant Office Action, summarily is that Blecha *et al.* teach the same truncated PR-39 peptides (e.g., PR-14 and PR-19) as the oligopeptides cited in claims 12, 13 or 14 (e.g., peptides comprising SEQ ID NO: 3, 4 or 5), and PR-14 and PR-19; and have the same structural features as the claimed PR-39 oligopeptides; and have identical amino acid sequence to the N-terminal region of native PR-39 peptide". On this basis, the Examiners then conclude that the newly found properties and characteristics of applicants' defined analog oligopeptides would be expected for the peptides of PR-14 and PR-19, even though the cited properties are not indicated in the reference.

In response, applicants respectfully submit and maintain that the Examiners' stated view and position concerning the teachings and suggestions of the Blecha *et al.* publication are neither relevant to nor

material to the re-defined and severely size-restricted oligopeptides now recited by currently amended independent claims 11 and 15 respectively. Even a short review of the facts and information disclosed by the Blecha *et al.* publication demonstrates how inappropriate and inapplicable this publication really is to applicants' currently claimed invention.

## A. The Factual Content Of The Blecha et al. PCT Publication:

- 1. The Blecha *et al.* publication explicitly discloses an attempt to synthesize peptide compositions of varying size and amino acid residue formulation in order to identify those peptide variants which are antimicrobial in effect and can be used to inhibit microbial growth and microbial infections [Page 1, lines 7-30].
- 2. Blecha *et al.* publication discloses merely that a range of differently formulated peptide variant sequences were synthesized, each of which was loosely based on a very different and invariably partial amino acid sequence fraction of the 39 amino acid residue length of the native PR-39 peptide. The conventional knowledge concerning the native, 39 residue length, PR-39 peptide is solely that it was previously isolated from wound fluid; and it was shown to be biologically active for the induction of syndecan expression in mesenchymal cells [Page 1, lines 34-35; Page 2, lines 1-14].

- 3. The Blecha *et al.* publication investigated the shorter-length peptide on an activity comparison basis to the conventionally known activity of native PR-39 peptide. Each of the differently formulated experimental shorter length peptide variants were individually tested and empirically evaluated by Blecha *et al.* in order to reveal which, if any, of these shorter length peptide sequences would retain and experimentally demonstrate the well-established anti-microbial properties of the native PR-39 peptide. The amino acid residue content of each variant peptide which was experimentally evaluated is shown by Fig. 1 [Page 5, lines 31-35; Page 6, lines 1-15].
- 4. The Blecha *et al.* publication disclosed an experimental protocol and empirical testing procedures directed solely and exclusively to revealing antimicrobial properties similar to those of native PR-39; and demonstrated empirically which, if any, the shorter length peptide fractions (of differing formulations) had any capacity for the active killing of microorganisms and/or the active suppression of microbial multiplication and/or growth [Page 3, lines 9-20].
- 5. The Blecha *et al.* publication sets forth the experimental test model; and discloses the series of in-vitro assays used to determine empirically which of the peptide fraction variants possesses and demonstrates the anti-

microbial activity of the native PR-39 peptide structure. These empirical assays employed included: the gel-overlay assay, the lawn-spotting assay, the minimal inhibitory concentration test, the measurement of post antibiotic effects, the susceptibility of neutrophil phagocytosis, the regulation of neutrophil superoxide anion production, neutrophil chemotaxis capability, and the influence on intestinal epithelial cells [Page 6, lines 16-34; Page 7, lines 1-34; Page 8, lines 1-21].

6. The Blecha *et al.* publication states that each of the six variant peptide fractions empirically evaluated had a very different residue length and an individual amino acid residue content. Three peptide variants were: PR-15, a fifteen residue length peptide structure constituting a fraction of the amino acid residues found at the COOH-terminal end of the native PR-39 peptide molecule; PR-16, a peptide sequence containing only the sixteen amino acid residue to be found at position nos. 11-26 in the native PR-39 peptide structure; and PR-23, a peptide sequence of twenty three residue length and having only amino acid residues to be found at position nos. 4-26 in the native PR-39 peptide. Thus, as a visual inspection of SEQ ID NOS: 6, 5 and 3 respectively in the publication shows, none of the PR-15, PR-16 or PR-23 peptide structures contained an N-terminus sequence beginning with the amino acid resides Arg-Arg-Arg.

- 7. The Blecha *et al.* publication thus discloses only three variant peptides having an N-terminus sequence beginning with the amino acid resides Arg-Arg-Arg. These three variants were formulated as the PR-14 peptide fraction (a 14 amino acid residue length), the PR-19 peptide fraction (a 19 amino acid residue length), and the PR-26 peptide fraction (a 26 amino acid residue length).
- 8. The Blecha *et al.* publication clearly and unequivocally presents the empirical results as to whether or not any of the six peptide variants retained and demonstrated the anti-microbial biological activity of the native PR-39 peptide. In particular, the Blecha *et al.* publication expressly and overtly states the following:
- (i) While PR-26 showed antibacterial activity against *E.* coli in the geloverlay assay, the PR-14, PR-15, PR-16, PR-19, and PR-23 variants did NOT show any antibacterial activity [page 12, 19-22];
- (ii) While PR-26 showed antibacterial activity in the lawn-spotting assay, the PR-14, PR-15, PR-16, PR-19, and PR-23 variants did NOT show any antibacterial activity [page 12, lines 23-29]; and
- (iii) While PR-26 significantly reduced  $O_2$  generation by intact neutrophils, the PR-14, PR-15, PR-16, PR-19, and PR-23 variants did NOT

meaningfully reduce  $O_2$  generation by intact neutrophils [page 15, lines 15-33].

- 9. The Blecha *et al.* publication unequivocally demonstrates and empirically reveals that the PR-14 and the PR-19 peptides in particular do not have any anti-microbial activity whatsoever [Page 15, lines 27-29]. Equally important, alone among the six variant peptides synthesized and experimentally tested, only the PR-26 peptide structure demonstrated any anti-microbial activity similar to that of the native PR-39 peptide [Page 12, lines 18-35; Page 13, lines 1-47].
- 10. The Blecha *et al.* publication also explicitly states in detail what are the direct teachings of and drawn conclusions for the reported experimental tests and empirical results. These teachings and conclusions are clearly and explicitly stated [Page 12, lines 30-35 and Page 13, lines 1-4]. They are:
  - (a) The COOH-terminus of the PR-39 structure does not contribute to antibacterial activity;
  - (b) The N-terminus of the PR-39 structure is not sufficient for antibacterial activity;

- (c) The PR-26 peptide containing residue Nos. 1-26 of the original PR-39 structure is the antibacterial domain; and
- (d) A particular secondary peptide structure conformation is required to exist and be present, as shown by both the PR-26 peptide and the original PR-39 original peptide, in order that the desired antibacterial activity exist.
- 11. The Blecha *et al.* publication therefore unequivocally teaches and factually demonstrates that: (i) only one variant peptide structure, the PR-26 peptide variant, is demonstrably biologically active; (ii) only the PR-26 peptide variant is operative and functional via its demonstrated antibacterial properties; (iii) PR-14 and PR-19 have no effective or meaningful biological activity, and (iv) PR-14 and PR-19 are deemed to be of no technical consequence nor to have any scientific value whatsoever.

## B. The Examiners' Errors:

Based on the factual summary given above for the Blecha *et al.*publication, applicants respectfully direct the Examiners' attention to the following discrepancies and errors, which are presented in two separate parts.

- Part I: The Cited And Applied Blecha et al. Reference
- (1) The sole and exclusive criteria of experimental evaluation for the described Blecha *et al.* peptide fractional variants are as anti-microbial agents. No other activity, property, or biological characteristic is revealed or suggested as being of possible value to Blecha *et al.*
- (2) Of those Blecha et al. short-length peptides which began with the Arg-Arg-Arg residues at the N-terminal end, the PR-14 and the PR-19 variant peptides in particular failed to show any pharmacological activity whatsoever. Regardless of how these two variant peptides were evaluated by Blecha et al., they were inactive, inoperative, and non-functional.
- (3) There is no teaching or inference attributable to Blecha *et al.* that there is any other biological activity nor any other useful function that is of interest or of any technical worth for the PR-19 and PR-14 peptide variants. In particular, there is no hint or suggestion whatsoever that a radically different pharmacological activity or operative function, such as a selective control over proteolytic degradation by proteasomes in the cytoplasm of a viable cell, is either possible or of any meaningful relevance. No facts, nor evidence, nor information of any kind exist within the Blecha *et al.* publication which infers, or imputes, or predicts even the possibility of any

pharmacological activity for the synthesized PR-14 and PR-19 peptide variants.

(4) Also standing in direct contradiction to the Examiners' stated view and conclusion are the empirical data reported by Blecha *et al.* which show that the PR-14 peptide variant and the PR-19 peptide fractional variant is pharmacologically inert and biochemically quiescent. Therefore, without even the barest factual support for such an outlandish proposal, these variant peptides cannot rationally be predicted to have any biological properties or operational functions at all. are, at most, logically expected to be biochemically and pharmacologically quiescent; and are seen as non-reactive peptide fractions having no biological activity or functional value.

#### Part II: The Examiners' False Premises

(a) The Examiners have presented applicants with a self-created hypothesis and illogical premises which rest and depend upon an bizarre and factually unsupported theory. Their proposed theory is: intrinsic and predictable properties must exist for the PR-14 and PR-19 peptide fractions because the structure of the native, 39 residue, PR-39 peptide has demonstrable anti-microbial properties. The hypothesis is best presented via the Examiners own words...

"Although the peptides of PR-14 and PR-19 do not have anti-microbial activity against specific bacteria (e.g. E. Coli) as indicated by Blecha *et al.*, this anti-microbial activity is only one biological activity being tested, the reference does not indicate the peptides of PR-14 and PR-19 are inoperative and non-functional in all biological activities." [page 4, lines 13-17 of the instant Office Action].

In substantive effect, the Examiners have refuted and denied the relevance and materiality of the cited and applied reference of record, the Blecha *et al.* publication. Also, instead of relying on the substantive disclosure of the cited and applied prior art reference, the Examiners have unaccountably focused upon one solitary fact - that native PR-39 peptide has anti-microbial properties; and then speculatively, illogically, and erroneously drawn an inference and presumption from the solitary fact that all short-length analog fractions of PR-39 must therefore have some kind or type of biological activity - even if there are directly opposing facts and overwhelming empirical evidence to the contrary in the prior art reference.

Moreover, in order to support their self-generated theory, the Examiners have manipulated logic, and tacitly employed an inversion of deductive reasoning technique - by which the Examiners now present applicants with two speculative and grotesque underlying premises. These are: (i) all shorter-length peptide fractions derived from native PR-39 peptide are now presumed (without the benefit of evidence) to have an operative and functional biological activity, even if the specific nature or kind of biological activity is as yet unknown; and (ii) applicants now are given the

twin legal burdens of going forward to dispute the Examiners' stated premise as well as factually disproving (via presentation of direct evidence to the contrary) the Examiners' stated premise that some type of pharmacological activity other than anti-microbial properties is presumed to exist for all peptide analogs of native PR-39 peptide, especially the PR-14 and PR-19 peptide variants synthesized by Blecha *et al.* Applicants, however, submit and maintain that both of these Examiner created premises are unfounded, unreasonable, and nonsensical.

(b) In addition to the foregoing, it is abundantly clear that the Examiners have themselves directly challenged, refuted, and denied the relevance and materiality of the cited and applied reference of record. The Blecha *et al.* publication - which the Examiners have formally cited and applied as a factual reference and employed as a legal basis for rejection - indisputably and unequivocally shows the PR-14 and PR-19 variant peptides to be pharmacologically inert and biochemically quiescent. Nevertheless, the Examiners themselves now attack the credibility and deny the probative worth of the unambiguous facts and empirical results disclosed by the Blecha *et al.* publication as a prior art reference, while at the same time, formally continue to employ the now discredited reference as the legal basis for rejection under 35 USC 102(b). The Examiners' attempt to contort their

stated positions in this manner is thus simultaneously hypocritical and selfcontradictory in all respects.

- (c) The Examiners, via their self-created deductive inversion technique, have picked, chosen and combined a variety of presumptions and premises which are not factually supported by each other and are not directly related to each other by any information or knowledge or facts presently existing within the technical field of applicants' invention. As a consequence, the Examiners do not and can not show any factual teaching or supporting evidence from any source which might serve as a suggestion which meets the corresponding requisite limitations and functions recited by the claims now defining applicants' invention. Accordingly, as a matter of adjudicated case law, any anticipation rejection based on such false presumptions premises is factually insupportable, and is legally erroneous.
- (d) It is legally incumbent upon the Examiner to identify wherein each and every facet of applicants' claimed invention is disclosed within the prior art. Thus, an anticipatory reference must describe the claimed subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art, and that such existence would be recognized by persons of ordinary skill in the filed of the invention [In re Spada, 15]

U.S.P.Q.2d 1655 at 1657 (Fed. Cir. 1990)]. Moreover, anticipation specifically requires that each element and every particular limitation set forth within the claim language of the invention be found, either expressly or inherently described, in a single prior art reference [Verdegaal Bros. Inc. v. Union Oil Co., 2 U.S.P.Q.2d 1051 at 1053 (Fed. Cir. 1987); Richardson v. Suzuki Motor Co., 9 U.S.P.Q.2d 1913 at 1920 (Fed. Cir. 1989); RCA Corp. v. Applied Digital Data Systems Inc., 221 USPQ 385 at 388 (Fed. Cir. 1984)].

Therefore, because the Examiners have failed to provide such facts or evidence, the Examiners have failed to discharge their legal burden and duty. Equally important, there is an insufficient factual basis to support any view that the claimed characteristic necessarily flows from or intrinsically exists in accordance with Examiners' self-created theory and erroneous presumptions. Under these circumstances, and as a matter of adjudicated case law decisions, the Examiners' conclusions are completely erroneous, factually unjustified, and legally unsupportable.

(e) In addition, as a matter of adjudicated case law, because the applied prior art reference does not expressly set forth the particular limitations and functions of the presently pending claims; and because the the prior art as such can not and does not provide the missing descriptive matter, there is no legal basis or rationale for the Examiners' view that the

requisite pharmacological activity would be recognized for the PR-14 and PR-19 peptide variants of Blecha *et al.* by persons of ordinary skill in the technical field.

Applicants therefore affirm that the Examiners have made multiple and prejudicial errors of fact and law. Accordingly, for all these reasons, applicants respectfully request that the Examiners reconsider their stated conclusions and withdraw this ground of rejection against the currently pending claims.

# III. The Rejection Under 35 USC 102(a)

The Examiners have rejected the previously pending claims under 35 USC 102(a) as being anticipated by the Chan *et al.* article [*J. Biol Chem.* 273:28978-28985 (October 1998)]. A factual review and summary of the teachings and suggestions presented by the Chan *et al.* article is therefore in order.

### A. The Chan et al. article:

1. The stated purpose of the Chan *et al.* investigation was to explain the potential mechanism for native PR-39's antimicrobial effects on mammalian cells. The specific experimental aims were twofold: to explore the mode of action by which native PR-39 may affect mesenchymal cells;

and to identify those proteins that bind directly with native PR-39 [Page 28978, right-hand column, 1<sup>st</sup> full paragraph].

- 2. Chan *et al.* employed NIH 3T3 cells or endothelial cells in a series of radioactive cell binding assays and subsequent cell analyses for the identification of potential binding targets using either native PR-39 or two prepared probes. Experimentally, the native PR-39 peptide was iodinated prior to empirical use [identified as <sup>125</sup>I-PR-39]. The two prepared probes which were used to bind to specific targets were: a biotinylated 15-amino acid N-terminal fragment of PR-39 [identified as PR-39(15)]; and a biotinylated 12-mer peptide which was missing the first three arginine residues from its N-terminal end and was derived from PR-39(15) [identified as PR-39(12)]. Complete details as to metabolic labeling, cell fractionation and batch elution; SH<sub>3</sub> binding assays; and cell lysis, immunoprecipitation and immunoblotting are disclosed [Page 28979, right-hand and left-hand columns].
- 3. The experimental results and empirical data reported by Chan *et al.* include the following:

- (i) Native PR-39 binds cells in a receptor-dependent manner [Page 28979, right-hand column, bottom; and Page 28980, left-hand column, top].
- (ii) The PR-39(15) fragment was able to kill *Salmonella typhimurium*, was able to induce syndecan-1 expression, and was able to alter the electrical conductance of a lipid membrane in an artificial lipid bilayer system; and, thus, is similar to the full length native PR-39 peptide with respect to membrane activity and antimicrobial activity [Page 28980, left-hand column, bottom and Page 28980, right-hand column, top].
- (iii) The PR-39(12) fragment fails to kill  $Salmonella\ typhimurium$ , and does not bind to or enter endothelial cells [Page 28980, right-hand column,  $2^{nd}$  full paragraph].
- (iv) Native PR-39 peptide selectively binds recombinant proteins containing SH<sub>3</sub> domains [Page 28980, right-hand column, 4<sup>th</sup> full paragraph].
- (v) The PR-39(15) fragment binds with many different cytosolic proteins existing within NIH 3T3 cells; and particularly binds p130<sup>Cas</sup>, a native  $SH_3$  containing protein [Page 28980, right-hand column, 3rd full paragraph and bottom paragraph; Page 28981, left-hand column, top].
- (vi) PR-39(15) affects p130 subcellular distribution by inducing a decrease in cytosolic p130 level and an increase in cytoskeletal p130 level

within endothelial cells [Page 28981, left-hand column, middle and right-hand column, top].

4. Chan *et al.*, after reviewing and considering these experimental results and empirical data in depth, then conclude that "...PR-39, a peptide that is secreted into the extracellular environment, can directly interact with cell membranes, penetrate cells, and affect intracellular signal transduction factors" [Page 28985, left-hand column, final paragraph].

These facts constitute the sum and substance of the cited and applied Chan *et al.* article as a prior art reference.

# B. There is a lack of relevance for the Chan et al. article:

The factual summary presented above summarizes the quantum and quality of information which is taught and/or suggested by the disclosure of the Chan *et al.* article to persons of ordinary skill in the technical field. The major thrust and underlying rationale of the rejection stated by the Examiners in the instant Office Action thus rest simply on the bare fact that a 15 amino acid residue peptide fragment, PR-39(15), derived from native PR-39 was synthesized by Chan *et al.*; was employed as a peptide probe in cell binding studies for comparison with native PR-39 peptide; and that the

peptide probe showed antimicrobial activity similar to that of PR-39. However, these facts and data no longer bear upon or have relevance to applicants' claimed invention as now re-defined by currently amended independent claims 11 and 15 respectively.

Applicants respectfully maintain that none of the information disclosed by the Chan *et al.* article pertains to the severely size- restricted peptide size requirements, nor can serve as a basis for inferring any pharmacological activity, nor can suggest any specific functions and capabilities, similar to those explicit requirements and limitations demanded by currently amended independent claims 11 and 15. Equally important, nothing disclosed within the Chan *et al.* article can provide a substantive basis for predicting either the presence or absence of pharmacological activity in a peptide structure shorter than 15 amino acid residues; nor can the cited and applied reference act as a guide for generating a structure/function formula which might accurately forecast the presence or absence of specific functions and capabilities for a particular oligopeptide less than 15 residues in length.

Applicants submit and affirm that the requisite attributes and characteristics of applicants' invention as currently claimed cannot be inferred or predicted by the Examiners with any degree of certainty from the knowledge taught or suggested by the Chan *et al.* article. To the contrary, any attempt to create such a rationale would constitute mere guesses and

wild speculation; and these ephemeral qualities are not proper or acceptable substitutes for reliable evidence or trustworthy facts.

Applicants also respectfully remind the Examiners that it is incumbent upon them to identify wherein each and every facet of the claimed invention is disclosed within the applied reference, If, however, the Examiners fail to provide such facts or evidence, they have failed to discharge their legal burden; and there is no adequate factual basis to support a view that the claimed characteristic necessarily flows from or intrinsically exists within the cited and applied prior art reference. Under these circumstances, any view that the claims in question are anticipated is completely erroneous, factually unjustified, and legally unsupportable [In re King, 231 USPQ 136 (Fed. Cir. 1986); W.L. Gore & Associates v. Garlock Inc., 220 USPQ 303 (Fed. Cir. 1983); Continental Can Co. USA Inc. v. Monsanto Co., 20 U.S.P.Q.2d 1746 at 1749 (Fed. Cir. 1991)].

Therefore, for the reasons presented above, applicants believe that the Examiners' stated views and conclusions are not relevant nor material to applicants' currently claimed invention. Accordingly, applicants respectfully request that the Examiners reconsider their stated position and withdraw this ground of rejection against the presently pending claims.

In sum, applicants have addressed each basis of rejection stated in the instant Official Action forthrightly and objectively. In applicants' view, each relevant issue or controversy has been acted upon and resolved completely. For these reasons, applicants respectfully submit and affirm that currently amended independent claims 11 and 15, as well as previously pending dependent claims 13 and 14 respectively, are therefore now allowable.

In view of the above discussion and detailed review, applicants believe that this case is now in condition for allowance and reconsideration is respectfully requested. The Examiners are invited to call applicants' undersigned attorney should they feel that such a telephone call would further the prosecution of the present application.

Respectfully submitted,

MICHAEL SIMONS YOUHE GAO

Date:

Rν

David Prashker

Registration Number 29,693

Attorney for applicants

P.O. Box 5387

Magnolia, Massachusetts 01930

Tel: (978) 525-3794

Fax: (978) 525-3791

E-mail: bearbonz@earthlink.net